

A. CLASSIFICATION OF SUB MATTER IPC 7 GOGF 11/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{G06F} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC

| Category ° | Citation of document, with Indication, where appropriate, of the relevant passages | Relevant to daim No. |
|------------|--|-------------------------|
| Х | EP 0 307 958 B (OKI ELECTRIC IND CO LTD) 22 March 1989 (1989-03-22) | 1,2, 8-13,19, 25 |
| A | | 3-7, 14-18, 20-24 |
| | column 1, line 6 -column 1, line 15 | |
| | column 2, line 41 -column 3, line 48 column 7, line 2 -column 7, line 10 | |
| | column 7, line 51 -column 9, line 44 figure 7 | |
| A | US 6 151 246 A (SO HOCK C ET AL) | 1-25 |
| | 21 November 2000 (2000-11-21) column 2, line 13 -column 3, line 22 | 1 |
| | column 9, line 33 -column 9, line 47 | } |
| | column 10, line 52 -column 11, line 67 | · |
| | -/ | |
| | -/ | 1 |

| X Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
|--|---|
| Special categories of cited documents: A document defining the general state of the art which is not considered to be of particular relevance E earlier document but published on or after the international filling date L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O document referring to an oral disclosure, use, exhibition or other means P document published prior to the international filling date but later than the priority date claimed Date of the actual completion of the international search | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family Date of mailing of the international search report |
| 23 March 2004 | 30/03/2004 |
| Name and malling address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Riiswiik | Authorized officer |
| Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Johansson, U |

Form PCT/ISA/210 (second sheet) (July 1992)

INTERN ONAL SEARCH REPORT



| C.(Continu | ation) DOCUMEN SIDERED TO BE RELEVANT | 7,15 03,05100 | | |
|------------|--|-----------------------|--|--|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | |
| A | US 6 112 314 A (CHEVALLIER CHRISTOPHE J ET AL) 29 August 2000 (2000-08-29) column 1, line 36 -column 2, line 29 column 3, line 12 -column 4, line 9 column 5, line 15 -column 6, line 62 | 1-25 | | |
| A | WO 02 086719 A (KONINKL PHILIPS ELECTRONICS NV) 31 October 2002 (2002-10-31) page 5, line 31 -page 6, line 35 page 9, line 1 -page 10, line 10 claims 1,6,7 | 1-25 | | |
| | | | | |

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

NTE ATIONAL SEARCH REPORT

Information on patent family members

| | <u> </u> | | T/IB 03/05106 | | | |
|--|----------|------------------|--|-------------------------|---------------------------|--|
| Patent document cited in search report | rT | Publication date | | Patent family member(s) | | Publication date |
| EP 0307958 | В | 22-03-1989 | JP DE DE EP HK US US | 1001481 | D1 T2 A2 A1 A | 22-03-1989 25-02-1993 12-08-1993 22-03-1989 19-06-1998 30-10-1990 24-09-1991 |
| US 6151246 | | 21-11-2000 | US US US EP JP | | Ã2 | 01-06-1999 30-01-2003 23-10-2001 28-04-1999 08-06-1999 |
| US 6112314 | Α | 29-08-2000 | US US | 5771346 6601191 | A B1 | 23-06-1998 29-07-2003 |
| WO 02086719 | A | 31-10-2002 | WO US | 02086719 2003046631 | A2 A1 | 31-10-2002 06-03-2003 |
| | | | | | | |

onal Application No

Form PCT/ISA/210 (patent family annex) (July 1992)